NFVP Series Voice Evacuation System

NFVP-150/200 Control Panels

- Clean Dead-front Construction
- An 8 Megabyte MP3 Driver with Message Capacity of 20 Minutes
- 25/50/100 Watt Built-in Power Amplifier
- 25 or 70 V RMS Field Selectable Class A/B Speaker Circuit
- 240 VAC Power Supply and Battery Charger
- Life Microphone Overload of Message and Tone
- Analog Addressable Compatible
- High Reliability, No Maintenance, Fully Supervised
- Easy Installation and Operation
- Studio Quality Voice Recordings Built-In Alarm and Alert Signals
- Works with 12VDC or 24VDC Fire Alarm Panels Works with Microprocessor Based and Networked Fire Alarm Systems
- 3 Minute Message Restart on Microphone Key
- 24 Hour Backup with two 12V 7AH Batteries
- Made in USA

Features

Note: The 42/82/122/122/122 models include the required NFVX-7M ASSM card(s).

NFVX-7M ASSM Supervised Zone Module
NFVX-6L8 LED Switch Module
NFVX-6L8 LED Input Module
NFVX-5L8 LED Output Module
NFVX-4C Remote Supervision Card - Required with Remote Microphone
NFVX-4M Remote Microphone
NFVX-8SA100 Backup Amp Switching card
NFVX-ATM Audio Transponder Module

Dimensions: 36.83cm (14.5 inches), H: 68.58cm (27 inches), D: 10.16cm (4 inches)
Color: Charcoal Grey (Standard) Red (Optional)

Contact

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The voice evacuation system shall be NFVP Systems Series NFVP-150/200 or approved equal. The voice evacuation system shall provide 20/50/100 watts voice power, and shall be UL Listed. The voice evacuation system shall be micro-processor based, and shall contain an integral microphone, 150V/200W audio amplifier, tone generator, digital message repeater, 240VAC power supply and battery charger.

The voice evacuation message(s)/signal shall be broadcast until the Fire Alarm Control Panel (FACP) is reset, or until the emergency personnel interrupt the broadcast with a manual page. On reset system shall automatically return to stand-by (normal operating) condition. A secondary message shall be provided which can be triggered by the closure of a contact from either the FACP or from any normally open contact device. Remote paging microphone(s) will be supported by the system through a supervised circuit. Remote microphone(s) may be mounted up to 5000 feet away from the voice evacuation panel.

**Engineering Specifications**

- NFVX-ZM = Supervised Zone Module
- NFVX-SL8L = LED Switch Card
- NFVX-SL8 = LED Input Card
- NFVX-SL8 = LED Output Card
- All cards connect and communicate over 10 pin ribbon cable.
- Up to 16 total cards per panel in any combination.

**NFVX - ZM**

**Supervised Zone Module**

- Current draw (24VDC input): 51mA (Standby), 130mA (All Call)
- 4 Class B or 2 Class A speaker circuits (Field selectable)
- 25/70 Vrms Field selectable
- Compatible with NFVX-SL8 for zone selection
- Circuits rated up to 50W @ 70V and 40W @ 25V

The NFVX-ZM Supervised Zone Module is used in conjunction with the NFVP series Voice Evacuation Panels to provide separately supervised and protected circuits from a single speaker output. The NFVX-ZM is default configured for 4 Class B circuits, but may be converted to 2 Class A with the flip of a switch. The NFVX-ZM can be ganged together to provide a maximum of 16 Class B circuits.

The NFVX-ZM in standard operating mode is strictly All Call. On any page, alarm, or message function all circuits activate. If separate zoning is required, the NFVX-ZM has zone selection inputs which may be activated by a N.O. dry contact. Additionally, the NFVX-SL8L (LED Switch Card) may be employed to provide both Zone and Message selection by switch. Each speaker circuit employs smart power metering to insure short circuit conditions are isolated from the other circuits. Each circuit is rated 50W @ 70V and 40W @ 25V.
**NFVX - IL8 LED**

Input Module

Current draw (On primary module battery back-up): 3mA (Standby), 5.3mA (All Call)

- 8 points
- 8 Red LED’s
- Programmable for multiple functions

The NFVX-IL8 LED Input Module can be used for page zone control, message selection, and control functions. The inputs monitor an external N.O. dry contact. NFVX-IL8’s are typically used for message/zone activation from an outside system such as Severe Weather Warnings. They can also be used to activate corresponding outputs on the NFVX-OL8. On activation, the corresponding LED will indicate red.

**NFVX - OL8 LED**

Output Module

Current draw (On primary module battery back-up): 3mA (Standby), 20mA (All Call)

- 8 points
- 8 Red LED’s
- N.O. Dry contacts rated at 30mA @ 0-24VDC

The NFVX-OL8 LED Output Module provides solid state N.O. dry contacts. It can also be separately tied to a voltage (0-24VDC), with that voltage used as a drive point or trigger. Outputs 1-4 and 5-8 may use different voltage references if desired. The NFVX-OL8 outputs may be programmed to follow message activation, page zones, or specific functions like PTT, alert, or control.

**NFVX - SL8 LED**

Switch Card

Current draw (On primary module battery back-up): 3mA (Standby), 5.16mA (All Call)

- 8 Momentary switches
- 8 tri-color LED’s (green/red/amber)
- Programmable for multiple functions

The NFVX-SL8 LED Switch Module provides switch selection for message activation, paging, and control functions. When used in conjunction with the NFVX-IL8 zone module, the SL8 can be programmed for page zone control. LEDs for switches assigned to page zones will indicate red for page and flashing red for alarm. The LED will indicate Amber if the associated speaker circuit is in a fault condition. Switches can be programmed to control corresponding points on the NFVX-OL8. Switch LEDs will indicate steady Red on activation.
**NFVX - RM**
Remote Microphone

The NFVX-RM is a supervised remote microphone for use with the NFVX-29, 50, 100, 150, & 200 voice evacuation panel. The microphone provides crystal-clear live voice messages over the system speakers.

Up to 5 NFVX-RM Panels may be connected to a single NFVX-SC Supervisory Card. This provides supervision of the wires to the NFVX-RM and they may be located up to 5000 feet away.

The NFVX-RM features dead front construction, a microphone with a “Press-to-Talk” button, and discrete LEDs to display “In-Use” and “Fault” status.

**Typical Application of Remote Microphone**

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**NFVX - BA100**
Backup Amplifier Switching Card

The NFVX-BA100 switching card continually monitors the primary amplifier for signs of failure. Should the amplifier fail, the NFVX-BA100 automatically activates a backup amplifier. A single amplifier can be used to back up one or more primary amplifiers. The backup amplifier does not require its own microphone and digital message repeater unless a fully redundant voice evacuation system is required.

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**NFVX - ATM**
Audio Transponder Module

The NFV-ATM provides a method of interfacing audio either into the evacuation system or from the evacuation system into an external paging system like a phone system.

It has several methods of accomplishing this and is fi selectable for its modes. It is capable of being activated by either contact closure or signal presence by use of a VOX. Voice Activation Circuit, the input may be Balanced Line, 1 Vrms into 600 Ohms, 25 Vrms or 70 Vrms. The input and output signals are isolated on systems will not experience ground loop problems.

**External Audio into the NFVP System**

**External Audio input with VOX**